From: Andrea Morrow
To: Gray, David

Cc: Ryan Vise; Emily Lindley; Lori Wilson; Richard Chism; Michael Honeycutt; Susan Johnson; Tracy Miller

Subject: Final draft response to AP?

Date: Sunday, September 3, 2017 1:28:09 PM

Air Quality Monitoring: Monitors are showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont. Of the available air monitoring data collected from August 24-September 2, 2017, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and local residents should not be concerned about air quality issues related to the effects of the storm.

EPA has its surveillance aircraft conducting air monitoring for the Arkema plant fire. Also, EPA's mobile air-monitoring unit will be in Houston to assist with air monitoring as well. Also, EPA's mobile air monitoring Trace Atmospheric Gas Analyzer bus is on the way to Houston to assist with air monitoring as well. The TAGA is a self-contained mobile laboratory capable of real-time sampling and of outdoor air or emissions. The instrumentation refers both to the analytical instrument and the mobile laboratory built around it.

Emergency response monitoring at the Arkema facility evacuation perimeter is being conducted. We will make those data available as we are able. So far, nothing of immediate health concern has been detected.

We have established a Unified Command with other state and federal partners, and are in the field conducting rapid needs assessments. The TCEQ will use the available technology that will best support the field activities being conducted, which may include the use of hand held air monitoring equipment.

Continue to monitor the TCEQ's Hurricane Response website for updates: https://www.tceq.texas.gov/response/hurricanes

**From:** Gray, David [mailto:gray.david@epa.gov] **Sent:** Sunday, September 03, 2017 1:24 PM

To: Andrea Morrow <Andrea.Morrow@tceq.texas.gov>

Cc: Ryan Vise <Ryan.Vise@Tceq.Texas.Gov>; Emily Lindley <Emily.Lindley@tceq.texas.gov>; Lori Wilson <Lori.Wilson@tceq.texas.gov>; Richard Chism <Richard.Chism@tceq.texas.gov>; Michael Honeycutt <Michael.Honeycutt@tceq.texas.gov>; Susan Johnson

<susan.johnson@tceq.texas.gov>; Tracy Miller <tracy.miller@tceq.texas.gov>

**Subject:** Re: Do we have a winner on the AP response?

# TAGA will arrive in Houston Monday

- Personnel will arrive in Houston on Tuesday for TAGA start-up
- TAGA will be operational on Wednesday

Sent from my iPhone

On Sep 3, 2017, at 1:22 PM, Andrea Morrow < Andrea. Morrow@tceq.texas.gov > wrote:

Call me. I have a question on the bus. 512-239-5011.

From: Gray, David [mailto:gray.david@epa.gov]
Sent: Sunday, September 03, 2017 1:20 PM
To: Ryan Vise <Ryan.Vise@Tceq.Texas.Gov>

**Cc:** Emily Lindley < <a href="mailto:Lindley@tceq.texas.gov">Emily Lindley@tceq.texas.gov</a>; Lori Wilson < <a href="mailto:Lori.Wilson@tceq.texas.gov">Lori Wilson@tceq.texas.gov</a>; Richard Chism <a href="mailto:Richard.Chism@tceq.texas.gov">Richard.Chism@tceq.texas.gov</a>; Andrea Morrow <a href="mailto:Andrea.Morrow@tceq.texas.gov">Andrea.Morrow@tceq.texas.gov</a>; Michael Honeycutt

Subject: Re: Do we have a winner on the AP response?

Can someone send me the final

Sent from my iPhone

On Sep 3, 2017, at 12:37 PM, Ryan Vise < Ryan. Vise@Tceq. Texas. Gov > wrote:

Yes I will send to Arkema

Sent from my iPhone

On Sep 3, 2017, at 12:27 PM, Emily Lindley < Emily.Lindley@tceq.texas.gov > wrote:

Ryan, we should send to Arkema as an FYI since they are mentioned. If you haven't already!

Sent from my iPhone

On Sep 3, 2017, at 12:26 PM, Gray, David <gray.david@epa.gov> wrote:

Share final and we will broadcast also

Sent from my iPhone

On Sep 3, 2017, at 12:25 PM, Lori Wilson < Lori.Wilson@tceq.texas.gov > wrote:

Good with Em's revision

Lori Wilson Executive Office TCEQ 512-239-1635

<image001.png>

From: Richard Chism

**Sent:** Sunday, September 03, 2017 12:23 PM **To:** Emily Lindley < <u>Emily.Lindley@tceq.texas.gov</u>>

**Cc:** Andrea Morrow <<u>Andrea.Morrow@tceq.texas.gov</u>>; Michael Honeycutt <<u>Michael.Honeycutt@tceq.texas.gov</u>>; Gray, David <<u>gray.david@epa.gov</u>>; Ryan Vise <<u>Rvan.Vise@Tceq.Texas.Gov</u>>; Susan Johnson

<susan.johnson@tceq.texas.gov>; Tracy Miller <tracy.miller@tceq.texas.gov>; Lori

 $Wilson < \underline{Lori.Wilson@tceq.texas.gov} >$ 

**Subject:** Re: Do we have a winner on the AP response?

Im good.

Sent from my iPhone

On Sep 3, 2017, at 12:22 PM, Emily Lindley <<u>Emily.Lindley@tcq.texas.gov</u>> wrote:

My edits below.

Sent from my iPhone

On Sep 3, 2017, at 12:17 PM, Andrea Morrow < <u>Andrea.Morrow@tceq.texas.gov</u>> wrote:

Any additions, corrections?

Air Quality Monitoring: Monitors are showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85

percent in Houston, and 36 percent in Beaumont. Of the available air monitoring data collected from August 24-September 2, 2017, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and local residents should not be concerned about air quality issues related to the effects of the storm.

EPA has its surveillance aircraft conducting air monitoring for the Arkema plant fire. Also, EPA's mobile air-monitoring unit will be in Houston to assist with air monitoring as well. Also, EPA's mobile air monitoring Trace Atmospheric Gas Analyzer bus will be in Houston to assist with air monitoring as well. The TAGA is a self-contained mobile laboratory capable of real-time sampling and of outdoor air or emissions. The instrumentation refers both to the analytical instrument and the mobile laboratory built around it.

Emergency response monitoring at the Arkema facility evacuation perimeter is being conducted. We will make those data available as we are able. So far, nothing of immediate health concern has been detected.

We have established a Unified Command with other state and federal partners, and are in the field conducting rapid needs assessments. The TCEQ will use the available technology that will best support the field activities being conducted, which may include the use of hand held air monitoring equipment.

Continue to monitor the TCEQ's Hurricane Response website for updates:

https://www.tceq.texas.gov/response/hurricanes

# <u>Hurricane Response - TCEQ - www.tceq.texas.gov</u>

#### www.tceq.texas.gov

Information you might need if you are affected by a tropical storm or hurricane.

From: Michael Honeycutt

Sent: Sunday, September 3, 2017 12:10 PM

To: Andrea Morrow

**Cc:** Emily Lindley; Gray, David; Ryan Vise; Richard Chism; Susan Johnson; Tracy Miller; Lori Wilson **Subject:** Re: Proposed response to AP questions with

EPA additions- please review

Tuesday

On Sep 3, 2017, at 12:09 PM, Andrea Morrow <<u>Andrea.Morrow@tceq.texas.gov</u>> wrote:

Do we know when that will begin? That will make my life a lot easier!;)

From: Michael Honeycutt

Sent: Sunday, September 3, 2017 12:08

PM

To: Emily Lindley

**Cc:** Gray, David; Andrea Morrow; Ryan Vise; Richard Chism; Susan Johnson; Tracy

Miller; Lori Wilson

**Subject:** Re: Proposed response to AP questions with EPA additions- please

review

Could also add TCEQ will soon begin daily updates on air quality that will be available on hurricane webpage.

On Sep 3, 2017, at 12:06 PM, Emily Lindley <<u>Emily.Lindley@tceq.texas.gov</u>> wrote:

What about adding this info in? It's pretty good. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont; and authorities expect that the network will be fully operational again by next week. Of the available air monitoring data collected from August 24-September 2, 2017, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and local residents should not be concerned about air quality issues related to the effects of the storm.

Anyone is welcome to disagree! Just my opinion. It's going in the other statement.

Sent from my iPhone

On Sep 3, 2017, at 11:57 AM, Gray, David

#### <gray.david@epa.gov>

wrote:

```
I should have
the
information
about on the
ground
monitoring
around cosby
in a few
minutes
Sent from my
iPhone
On Sep 3,
2017, at 11:51
AM, Andrea
Morrow
<<u>Andrea.Morrow@tceq.texas.gov</u>>
wrote:
     David,
     can
     you
     give
     me
     а
     description
     of
     what
     the
     TAGA
     bus
     does?
     This
     is
     а
     response
     to
     the
     Associated
     Press
     questions:
  1)
     We
     have
     been
     told
     EPA
     is
     doing
```

air monitoring

the Arkema plant in Crosby. Can you tell me what your monitoring has found? What chemicals in what concentrations? Where are you doing the monitoring exactly, with what instruments?

2)
Your
data
shows
multiple
ozone
and
PM
monitoring
stations
in
Houston
were
knocked

out during the story. Was it indeed more than half of the ozone monitors? When do

you expect them to be fixed and back online? 3)

Are

EPA/TCEQ

monitoring

air

quality

around

Houston

petrochemical

plants

and

refineries

to

look

for

potential

health

and

safety

problems?

Have

they

deployed

any

mobile

monitors?

(1

gather

these

are

EPA

crews

working

in

coordination

with

TCEQ?)

If

so,

what

have

they

found

in

the

last

few

days

near

petrochemical plants around the ship channel? If they haven't been monitoring, why not? The startup and shutdown operations typically produce heavier emissions of airborne contaminants, as we know. 2) Other than ozone and PM10 and PM2.5 are you monitoring for any other specific compounds? 3) What are the state of Texas and the EPA doing to monitor

public

the

health near the petrochemical plants and refineries given the extraordinary shutdown and startup pollution and the possibility of contaminants released into their neighborhoods? Will there be health monitoring? If so, by whom? lf not, why

#### From: Emily

not?

Lindley

Sent:

Sunday, September

3,

2017

11:48

AM

To:

Ryan Vise

Cc:

Andrea

Morrow;

Gray,

David;

Michael

Honeycutt; Richard Chism; Susan Johnson; Tracy Miller; Lori Wilson Subject: Re: Proposed response to ΑP questions with EPA additionsplease review I added the word Arkema at the end of the 1st paragraph. think we need to say what the TAGA bus is and what it does. 1 like that we got that in there.

Just need to explain

```
to
the
public
more.
Just
SO
I'm
straight
is
this
part
of
the
larger
statement
from
this
morning?
Or
something
different?
Sent
from
my
iPhone
On
Sep
3,
2017,
at
11:44
AM,
Ryan
Vise
<<u>Ryan.Vise@Tceq.Texas.Gov</u>>
wrote:
     l'm
     good
     with
     the
     language
     Sent
     from
     my
     iPhone
     On
     Sep
     3,
     2017,
     at
     11:43
     AM,
     Andrea
```

#### Morrow

#### <<u>Andrea.Morrow@tceq.texas.gov</u>>

#### wrote:

I've

heard

from

Cory, David,

and

Mike.

OCE

are

you

ok

with

the

start-

up/shut-

down

language?

Lori,

Emily,

Ryan,

any

changes?

#### Air

#### Quality

#### **Monitoring:** Monitors

showing

that

air

quality

at

this time

is

not

concerning

and

local

residents

should

not

be

concerned

about

air

quality

issues

related

to

the

effects

of

the

storm.

to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 70 percent of the monitors are up and working again; and

authorities expect

Due

that

the

network

will

be fully

operational

again

by

next

week.

EPA

has

its

surveillance

aircraft

conducting

air

monitoring

for

the

Arkema

plant

fire.

Also,

EPA's

mobile

air monitoring

TAGA

bus

will

be

in

Houston

to

assist

with

air

monitoring

as

well.

Emergency

response

monitoring

at

the

Arkema

facility

evacuation

perimeter

is

being

conducted.

We

will

make

those

data

we are able. So far, nothing of immediate health concern has been detected. The same rules apply for startup, shutdown activities however delays may occur based upon factors related to the emergency in some situations (i.e. power outages, computer system failure, etc.).

available as

# From:

Gray,

David

<gray.david@epa.gov>

Sent:

Sunday,

September

3,

2017 11:38 AM

To:

Michael Honeycutt

Cc:

Andrea

Morrow;

Richard Chism;

Ryan

Vise;

Susan

Johnson;

Tracy

Miller;

Lori

Wilson;

Emily

Lindley

#### Subject:

Re:

Proposed

response

to

ΑP questions

please

review

Feel

free

to

add

that

EPA

has

its

surveillance

aircraft

conducting

air

monitoring

for

the

plant

fire.

Also,

our

mobile air

monitoring

TAGA

bus

will

be

in

Houston

to assist with air monitoring. Sent from my iPhone On Sep 3, 2017, at 11:35 AM, Michael Honeycutt < Michael. Honeycutt@tceq.texas.gov> wrote: Ah. Missed that. On Sep 3, 2017, at 11:33 AM, Andrea Morrow <<u>Andrea.Morrow@tceq.texas.gov</u>> wrote: Не dropped the ozone question, Mike. From: Michael Honeycutt Sent: Sunday, September 3, 2017 11:32 AM

### Cc: Richard Chism; Ryan Vise; David Gray (gray.david@epa.gov); Susan Johnson; Tracy Miller; Lori Wilson; Emily Lindley Subject: Re: Proposed response to ΑP questions please review On the ozone blurb, you could add that TCEQ and EPA send ozone notifications like we always do to subscribers of our notification systems. There was nothing

unusual about this notification.

**To:**Andrea
Morrow

Sep 3, 2017, at 11:28 AM, Andrea Morrow <<u>Andrea.Morrow@tceq.texas.gov</u>> wrote: Okay, what do you all think of this: Air Quality **Monitoring:** Monitors are showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper

On

by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 70 percent of the monitors are up and working again; and authorities expect that the network will be

fully

preparation

again by next week. Emergency response monitoring at the Arkema facility evacuation perimeter is being conducted. We will make those data available as we are able. So far, nothing of immediate health

operational

The same rules apply for startup, shutdown activities however delays may occur based upon factors related to

the emergency

concern has been detected.

in some situations (i.e. power outages, computer system failure, etc.).

#### From:

Michael Honeycutt

#### Sent:

Sunday, September 3, 2017 11:23 AM

#### To:

Richard Chism; Andrea Morrow

#### Cc:

Ryan Vise; David Gray (gray.david@epa.gov); Susan

Johnson;

Tracy Miller

Subject: Re: Proposed response to ΑP questions

please review

You could add that we are doing emergency response monitoring

at the Arkema facility evacuation perimeter and will make that data available as we have time. So far, nothing of immediate health concern has been detected.

# From:

Richard Chism

# Sent:

Sunday, September 3, 2017 11:19:57 AM

#### To:

Andrea Morrow

#### Cc:

Ryan Vise; David Gray

# (gray.david@epa.gov);

Michael Honeycutt; Susan Johnson; Tracy Miller

#### Subject:

Re: Proposed response to AP questions

-

please review This is directly from the draft joint response this morning. You can use it. Air Quality **Monitoring:** Monitors showing that air quality at this time is not concerning and local residents should not be concerned about air quality issues related to the effects of the storm. Due to quick action and proper preparation by state authorities, all

the

ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 70 percent of the monitors are up and working again; and authorities expect that the network will be fully operational again by next

```
Sent
from
my
iPhone
On
Sep
3,
2017,
at
11:14
AM,
Andrea
Morrow
<<u>Andrea.Morrow@tceq.texas.gov</u>>
wrote:
     Which
     is
     correct,
     65%
     or
     this:
     Air
     Quality
     Monitoring:
     One
     of
     the
     many
     preparations
     for
     Hurricane
     Harvey
     included
     EPA,
     TCEQ,
     and
     other
     monitoring
     entities
     temporarily\\
     removing
     {\it approximately}
     75
     percent
     of
     the
     stationary
     air
     monitoring
     equipment
     from
     the
      greater
     Houston,
     Corpus
```

week.

Christi,

and

Beaumont

areas.

Since

then,

state and

local

authorities

are

working

to

get

the

systems

up

and

running

again.

As of

Saturday,

September

2,

over

70

percent

of

the

monitors

are

up

and

working again;

and

authorities

expect

that

the

network

will

be fully

operational

again

by

next

week.

Of

the

available

air

monitoring

data

collected

from

August

24-

2017, all measuredconcentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning and local residents should not be concernedabout air quality issues related to the effects of the storm. From:

September 2,

Ryan Vise

#### Sent:

Sunday, September 3, 2017 11:07  $\mathsf{AM}$ 

#### To:

Andrea Morrow

## Cc: David Gray (gray.david@epa.gov); Richard Chism; Michael Honeycutt; Susan Johnson; Tracy Miller Subject: Re: Proposed response to ΑP questions please review I'm good with these answers. Sent from my iPhone On Sep 3, 2017, at 11:06 AM, Andrea Morrow <<u>Andrea.Morrow@tceq.texas.gov</u>> wrote: FYI, Cory. Не has deleted the third question because he understands the nature of the AirNow report.

I

don't have sufficient information to answer these questions. suggest we say, the TCEQ has reactivated 65 percent of our monitoring network in the hurricaneaffected areas. (Insert EPA monitoring data here or explain why it is not available)

The same rules apply for startup, shutdown activities however delays may occur based upon factors related to the emergency in some situations (i.e. power outages, computer system

Hourly data from the operating

failure, etc.).

ozone monitors in TCEQ's network are used by the EPA to predict air quality. What you are looking at is а forecast based on onehour (snapshot) readings. The 201 ppb you referenced is not an actual monitored reading, it is а projection. TCEQ is aware of elevated ozone levels west of Houston which is not unusual for this time of year. 1) You are doing

are
doing
air
monitoring
at
the
Arkema
plant
in

Crosby. Can you tell me what your monitoring has found? What chemicals in what concentrations? Where are you doing the monitoring exactly? 2) Are EPA/TCEQ monitoring air quality around petrochemical plants and refineries looking for potential problems? Have they deployed any mobile air monitors? (1 gather these are EPA crews working coordination with TCEQ?) If so, what have they found in the last few days near the petrochemical plants around the

ship

channel? If they haven't been monitoring, why not? The startup and shutdown operations typically produce heavier emissions of airborne contaminants, right? 3) 1 saw an ozone level of 201 ppb recorded in Houston on Friday on airnow.gov and Andrea Morrow of TCEQ told my colleague Jason Dearen that the reading was recorded as single hourly max at one monitoring station. Your ozone level for the day (95 ppb) is based

on an

eighthour of average, she said. But that does not deny that а single station had that maximum level, correct? What station was it? Can you tell me what hour of the day? Did any other stations Very Unhealty ozon levels on Friday or Saturday? Hourly data from the operating ozone monitors in TCEQ's network are used by the EPA to predict air quality. What you are

looking at is a forecast based

hour (snapshot) readings. The 201 ppb you referenced is not an actual monitored reading, it is а projection. TCEQ is aware of elevated ozone levels west of Houston which is not unusual for this time of year. 4) What are the state of Texas and the EPA doing to monitor public health near the petrochemical plants and refineries given the extraordinary shutdown and startup pollution

and the possibility of contaminants released

on one-

into

their

neighborhoods?

Will

there be

health

monitoring?

If so,

by

whom?

If

not,

why

not?